

CLAIMS

I claim:

1. A cable handling trailer system comprising:
 - a trailer having a front end, a back end, and a pair of lateral sides;
 - a lifting assembly for lifting items onto and off of the trailer, the lifting assembly being pivotally mounted on the trailer; and
 - cable guiding means for guiding the cable onto and off of the spool.
2. The system of claim 1 wherein the cable guiding means comprises:
 - a guide structure for engaging a portion of cable moving onto and off of the spool; and
 - a boom structure mounted on the trailer for supporting the guide structure, the boom structure being pivotally mounted on the trailer such that the guide structure is movable along a path extending generally transverse to an axis of the trailer extending between the front and back ends of the trailer.
3. The system of claim 2 wherein the boom structure has a proximal end pivotally mounted on the trailer and a distal end extending away from the back end of the trailer in a cantilevered manner.
4. The system of claim 2 wherein the guide structure comprises first and second rotatable members having circumferential surfaces positionable adjacent to each other for moving a portion of the cable positioned between the

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circumferential surfaces of the first and second rotatable members.

5. The system of claim 4 wherein the first and second rotatable members are movable toward and away from each other such that the circumferential surface of the second rotatable member is abuttable against the circumferential surface of the first rotatable member.

6. The system of claim 1 wherein the lifting assembly comprises:

an elongate pole for extending through a hole in a spool, the elongate pole having a pair of opposite ends; and

a pair of support arms for supporting the elongate pole, the elongate pole being rotatably and releasably mounted on each of the support arms, each of the support arms being pivotally mounted on the trailer such that the support arms are pivotable between a transport position and a retrieve position, the transport position being characterized by the elongate pole being positioned above the deck of the trailer, the retrieve position being characterized by the elongate pole being positioned behind the back end of the trailer;

7. A cable handling trailer system comprising:

a trailer having a front end, a back end, and a pair of lateral sides;

a lifting assembly for lifting items into and off of the trailer, the lifting assembly being pivotally mounted on the trailer; and

control means for controlling the supply of power from the power supply to the lifting assembly, the control means including a housing for mounting at least one control thereon, the housing is movably mounted on the trailer for permitting movement of the housing between a storage position and an operational position.

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8. The system of claim 7 wherein the operational position is characterized by a portion of the housing extending rearwardly of the back end of the trailer and the storage position is characterized by the housing being positioned above the trailer.

9. The system of claim 7 wherein the control means further comprises a pivot mount pivotally connecting the housing to the trailer and having a pivot axis about which the housing pivots.

10. The system of claim 9 wherein the control means further comprises a pivot arm extending between the pivot mount and the housing for spacing the housing from the pivot axis of the pivot mount.

11. A cable handling trailer system comprising:
a trailer having a front end, a back end, and a pair of lateral sides;
a lifting assembly for lifting items into and off of the trailer, the lifting assembly being pivotally mounted on the trailer; and
a dumpster assembly for permitting hauling of loose material on the trailer.

12. The system of claim 11 wherein the lifting assembly includes an elongate pole and a pair of support arms pivotally mounted on the trailer and supporting the elongate pole; and
wherein the dumpster assembly comprises a dumpster receptacle having a top and a bottom; linking means for removably linking the dumpster receptacle to the elongate pole of the lifting assembly; and securing means for removably securing the dumpster receptacle to the support arms.

13. The system of claim 12 wherein the securing means includes a pair of securing structures, each of the securing structures comprising:

- an arm loop mounted on one of the support arms;
- a dumpster loop mounted on the dumpster receptacle toward the bottom of the dumpster receptacle; and
- a securing element removably linking the arm loop on the support arm to the dumpster loop on the dumpster receptacle.

14. The system of claim 12 wherein the linking means includes a pair of linking assemblies with a lateral separation between the pair of linking assemblies being adjustable, each of the linking assemblies comprising:

- at least one loop mount mounted on the dumpster receptacle toward the top of the dumpster receptacle;
- a linking collar removably mounted on the elongate pole; and
- a linking element connecting the dumpster receptacle to the linking collar.

15. A cable handling trailer system comprising:
a trailer having a front end, a back end, and a pair of lateral sides;
a lifting assembly for lifting items into and off of the trailer, the lifting assembly being pivotally mounted on the trailer; and
a level winding assembly for guiding cable winding onto a spool when the spool is mounted on the lifting assembly, the level winding assembly being laterally movable for guiding the cable laterally with respect to the spool.

16. The system of claim 15 wherein the level winding assembly comprises:

a base structure for removably mounting on the trailer;
a swing structure pivotally mounted on the base structure for
engaging a portion of the cable; and
a swing actuator structure for pivoting the swing structure
with respect to the base structure.

17. The system of claim 16 wherein the swing structure
comprises:

an arm having a lower end pivotally mounted on the base
structure and an upper end;

a head portion mounted on an upper end of the arm, the head
portion having a plurality of rollers formed into a U-shaped
configuration with an open top.

18. A cable handling trailer system comprising:

a trailer having a front end, a back end, and a pair of lateral
sides, the trailer including a deck with a top extending from a first
one of the lateral sides of the trailer to a second one of the lateral
sides of the trailer;

a lifting assembly for lifting items into and off of the trailer,
the lifting assembly being pivotally mounted on the trailer toward
the back end of the trailer, the lifting assembly comprising:

an elongate pole for extending through a hole in a spool,
the elongate pole having a pair of opposite ends; and

a pair of support arms for supporting the elongate pole,
the elongate pole being rotatably and releasably mounted on
each of the support arms, each of the support arms being
pivotally mounted on the trailer such that the support arms
are pivotable between a transport position and a retrieve
position, the transport position being characterized by the
elongate pole being positioned above the deck of the trailer,

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the retrieve position being characterized by the elongate pole being positioned behind the back end of the trailer.

19. The system of claim 18 additionally comprising an auxiliary arbor support assembly for supporting an additional pole and spool on the pair of support arms at a location spaced from the pole removably mounted on the second ends of the pair of support arms.

20. The system of claim 19 wherein the auxiliary arbor support assembly comprises:

 a pair of supplemental hook members, each of the supplemental hooks being mounted on one of the support arms at a location spaced from the first and second ends of the support arms; and

 an additional post removably mounted on the supplemental hook members for supporting a spool.

21. A cable handling trailer system comprising:
 a trailer having a front end, a back end, and a pair of lateral sides;
 a lifting assembly for lifting items into and off of the trailer, the lifting assembly being pivotally mounted on the trailer; and
 a driving mechanism for controlling rotation of the spool, the driving mechanism comprising:

 spool engaging means for engaging at least one of the outer discs of the spool to rotate the spool; and

 supporting means for supporting the spool engaging means on the trailer.

22. The system of claim 21 wherein the spool engaging means comprises:

a pair of laterally spaced wheels, each of the wheels having a circumferential surface for engaging a circumferential edge of one of the outer discs of the spool;

a rotator axle rotatably mounted and having the laterally spaced wheels mounted thereon such that the laterally spaced wheels rotate with the rotator axle;

a braking means for braking rotation of the rotator axle and the laterally spaced wheels; and

a motor coupled to the axle for rotating the rotator axle in two directions of rotation.

23. The system of claim 21 wherein the supporting means comprising:

a pivotal axle mounted on the trailer in a manner permitting pivot rotation of the pivotal axle about a longitudinal axis of the pivotal axle;

an upright member mounted on the pivotal axle and extending outwardly from the pivotal axle in a direction substantially perpendicular to the longitudinal axis of the pivotal axis,

an actuating member having a first end and a second end, the first end of the actuating member being coupled to the trailer and the second end of the actuating member being coupled to the upright member; and

a pair of bars, each of the bars being elongate and having a first end and a second end, the first ends of the bars being coupled to the pivotal axle and the second ends of the bars being coupled to the rotator axle.